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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,556	01/27/2006	Josephus Arnoldus Kahlan	NL030949	6157

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
DO, PENSEE T	

ART UNIT	PAPER NUMBER
1641	

MAIL DATE	DELIVERY MODE
10/14/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/566,556	KAHLAN ET AL.	
	Examiner	Art Unit	
	Pensee T. Do	1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-19 and 24-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-19, 24-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of group I, claims 15-19, 24-27 in the reply filed on July 8, 2009 is acknowledged.

Priority

This application 10566556, PG Pub. No. 20060194327 filed 01/27/2006 is a national stage entry of PCT/IB04/51297 , International Filing Date: 07/27/2004 and claims foreign priority to 03102353.4 , filed 07/30/2003.

Amendment Entry & Claims status

The amendments filed on July 8, 2009 and March 20, 2009 have been acknowledged.

Claims 15-19, 24-27 are pending and being examined.

Claims 1-14, 20-23, 28-37 are cancelled.

Withdrawn Rejection(s)

Rejection under 112, 2nd paragraph in the non-final rejection sent on December 22, 2008 is withdrawn herein.

Rejection under 102 by Simmonds is also withdrawn herein.

Claimed Invention

15. (Previously Presented) A method comprising:

- using a magnetic field generator disposed on a substrate to generate an [[ac]]AC magnetic field,

- sensing with a magnetic sensor element also disposed on the substrate a magnetic property of at least one magnetic particle which magnetic property is related to the [[ac]]AC magnetic field, wherein a frequency of the [[ac]]AC magnetic field is at least 100 Hz.

New Grounds of Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 15-19, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simmonds et al. (US 6,437,563) in view of Baselt (US 5,981,297).

Simmonds teaches a method comprising generating an ac magnetic field in the magnetic sensor element at a frequency of 200 KHz which is above 100 Hz; (see col. 8, lines 15-18; col. 9, lines 30-35; col. 3, lines 10-31).

With respect to claim 16, since the specification (0018) defines that if the frequency is above 50 KHz, then the thermal white noise is dominant over the 1/f noise. Since Simmonds teaches the frequency is 200 KHz which is above 50 KHz, the thermal white noise must be dominant over the 1/f noise.

With respect to claim 17, Simmonds teaches an amplifier connected to the magnetic sensor. (see col. 9, lines 49-56).

With respect to claim 18, the magnetic field is perpendicular to the plane of the magnetic sensor element (see fig. 4, 4A, ref. 45 for the sensor, and ref. 35 in fig. 3 for the magnets).

With respect to claim 19, Simmonds teaches calibration measurements in the absence of magnetic particles (see col. 9, lines 5-27; col. 6, lines 15-23).

With respect to claim 25, Simmonds teaches the use of the method in diagnostic biological or chemical analysis. (see col. 1, lines 25-45).

With respect to claims 26 and 27, Simmonds teaches that the substrate for holding the sample or binding site is a semiconductor, i.e. silicon or glass substrate (see col. 5, lines 48-52).

However, Simmonds fails to teach the magnetic field generator, the magnetic sensor and the binding site are all disposed on one substrate.

Baselt teaches a chip comprising a substrate made of up semiconductor material, i.e. silicon (see col. 8, lines 47-48) for detecting magnetic particles. A magnetic generator (figure 7, ref. 75- metal lines for generating magnetic field -see col. 8, lines 49-58) and a magnetic sensor (figure 7, ref. 74) are all disposed on the substrate (figure 6, ref. 61). The substrate also comprises a binding site to bind to the magnetic particles. (see figures 6, ref. 63 and 64).

Thus, it would have been obvious to one of ordinary skills in the art to fabricate the magnetic sensor of Simmonds on a chip array according to the teaching in Baselt so that several assays can be performed simultaneously at a faster rate with greater sensitivity. (see Baselt col. 4, lines 35-45).

Response to Arguments

Applicant's arguments with respect to claims 15-19 have been considered but are moot in view of the new ground(s) of rejection.

Applicants amended the claims to recite that the magnetic field generator, the magnetic sensor and the binding site to be on the same substrate which distinguish the present invention from Simmonds. Therefore, Simmonds was withdrawn as a 102 prior art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pensee T. Do whose telephone number is 571-272-0819. The examiner can normally be reached on Monday-Friday, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Shibuya can be reached on 571-272-0806. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pensee T. Do/
Examiner, Art Unit 1641

/Mark L. Shibuya/
Supervisory Patent Examiner, Art Unit 1641